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means for measuring and quantifying said data.

5. (Amended) The wine quality sensor of claim 3, wherein said wine

bottle is formed of glass, wherein said bottle may be sealed with a seal after it is

filled with wine, wherein said sensor package is integrated with a sensor

integration configuration selected from the group consisting of (i) integration of

said sensor package within said glass, (ii) integration of said sensor package

within said seal and (iii) integration of said sensor package between said seal and

said glass.

33. (Amended) The wine quality sensor of claim 1, wherein said data is

selected from the group consisting of galacturonic acid, gums; tartaric acid, malic

acid, citric acid, succinic acid, lactic acid, acetic acid, potassium bitartrate, formic,

Yair Margalit, Pacid, oxalic acid, pyruvic acid, butyric acid, iso-butyric acid,

hexanoic acid, octanoic acid, a-Ketoglutaric acid, ethanol, methanol, methyl ester,

n-propanol, isopropanol, n-butanol, isobutanol, n-amyl alcohol, 3-methylbutanol,

2-methylbutanol, n-hexanol, 2-phenylethanol, polyalcohols (polyols), 2,3-


butandiol, glycerol, erythritol, xylitol, arabitol (also called arabinitol), mannitol,

acetaldehyde, acetoin and diacetyl, acetate, butyrate, oxanoate and other esters,

ethyl acetate, ethyl formate, propyl acetate, isopropyl acetate, isobutyl acetate,

isoamyl acetate, phenylethyl acetate, ethyl propionate, ethyl valerate, ethyl

hexanoate (caproate), ethyl octanoate (caprylate), ethyl decanoate (caprate), ethyl




lactate, ethyl succinate (acidic ester), methyl o-anthranilate, amino acids, diammonium phosphate, proteins, nitrates, amino acid esters, vitamins, biotin, choline, gallic acid, coumaric acid, caffeic acid, ferulic acid, catechin, epicatechin, gallic acid gallate, procyanidin, catechin catechin gallate, hydroxycinnamic acid esters, acids, glutathionyl caffeic acid, catechin+epicatechin, catechin-gallate, afzelechin, catechin, epicatechin, and gallic acid, flavane (3,4) diol, flavonol-3, cyanidin, delphinidin, peonidin, petunidin, malvidin, anthocyanins, glycoside, catechin, epicatechin, potassium, sodium, calcium, iron, lithium, magnesium, copper, lead, manganese, aluminum, zinc, rubidium, arsenic, nickel, anions, phosphate, sulfate, borates, silicates, halogens, fatty acids, boron, fluorine, silicon, phosphate, sulfate, chlorine, bromine, iodine, anions, sulfur dioxide, acetaldehyde-bisulfite (bound SO<sub>2</sub>), fumaric acid, vinylbenzene, benzaldehyde,  $\gamma$ -nonalactone, ethyl phenylacetate, p-hydroxybenzoic acid, p-pyrocatechuic acid, gallic acid, vanillic acid, syringic acid, salicylic acid, o-pyrocatechuic acid, gentisic acid, cinnamic acid, cinnamic acid, p-coumaric acid, caffeic acid, ferulic acid, sinapic acid, coumaric acid, caffeic acid, ferulic acid, digallic acid, ellagic acid, flavonoids, afzelechin, catechin, gallic acid, glycosides, tannins, flavylum ion, anthocyanins, pelargonidin, cyanidin, delphinidin, peonidin, petunidin, malvidin, ethyl acetate, ethyl caproate, terpenoids, glycosides, pyrazines, phenolics, chlorogenic acid, methyl anthranilate, ethyl anthranilate, methyl salicylate, ethyl salicylate, 2-methoxymethyl benzoate, 2-methoxyethyl benzoate, ethyl trans-2-butenoate, ethyl trans-2-hexenoate, ethyl trans-2-

octenoate, ethyl trans-2-decenoate, ethyl trans, trans-2,4 decadienoate, ethyl trans, cis-2,4 decadienoate, ethyl trans, trans, cis-2,4,7-decatrienoate, ethyl trans, cis-2,6-dodecadienoate, methyl 3-hydroxybutanoate, ethyl 3-hydroxybutanoate, ethyl 3-hydroxyhexanoate, damascenone, furaneol, methoxyfuraneol, ethyl 3-mercaptopropanoate, trans-2-hexen-1-ol, hydrogen disulfide, carbon disulfide, dimethyl disulfide, dimethyl sulfide, diethyl sulfide, diethyl disulfide, methanethiol, ethanethiol, dimethyl sulfoxide, methyl thiolacetate, ethyl thiolacetate, cis and trans-2-methylthiophan-3-ol, 5-[hydroxyethyl]-4-methylthiazole, thio aliphatic alcohols, methanionol, or 3-(methylthio)-propanol, polyphenoloxidases, laccase, chlorogenic acid, protocatechuic acid, glutathione,, 2-S-glutathionylcaftaric acid, acetaldehyde, <sup>13</sup>C-Norisoprenoids, 1,1,6-trimethyl-1,2-dihydronaphthalene (TDN), vitispirane, ellagic acid, lignins, gallic acid, aromatic aldehydes, vanillin, syringaldehyde, coniferylaldehyde, sinapaldehyde,  $\gamma$ -lactones, cis- $\beta$ -methyl- $\gamma$ -lactone, trans- $\beta$ -methyl- $\gamma$ -lactone, maltol, cyclotene, ethoxylactone, furfural, furfuryl alcohol, Guaiacol, geosmin, anthocyanine-bisulfite, malvidin glucoside, quinones, tartaric acid, potassium bitartrate, calcium tartrate, fumaric acid, calcium carbonate, sorbic acid, ethyl sorbate, benzoic acid and sodium benzoate, diethyl dicarbonate (DEDC), dimethyl dicarbonate (DMDC), iron, copper, aluminum, hydrogen sulfide, mercaptan, diethyl sulfide, ethyl mercaptan, (1)pH, diacetyl, acetoin, 2,3-butandiol, 2-ethoxyhexa-3,5-diene, histamine, tyramine, putrescine, cadaverine, ethyl carbamate, urea and carbamyl phosphate.

34. (Amended) A method for measuring wine quality, comprising:  
sensing data indicative of wine quality, wherein the step of sensing data is carried out with means for sensing data , wherein said means for sensing data include at least one sensor operatively located within a sealed wine container, wherein said at least one sensor directly contacts wine or wine vapor within said sealed wine container; and  
measuring and quantifying said data.

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35. (Amended) The method of claim 34, wherein the step of sensing data includes sensing data selected from the group consisting of an optical transmission spectrum, an optical fluorescence spectrum, an optical scattering coefficient, galacturonic acid, gums; tartaric acid, malic acid, citric acid, succinic acid, lactic acid, acetic acid, potassium bitartrate, formic , Yair Margalit, Pacid, oxalic acid, pyruvic acid, butyric acid, iso-butyric acid, hexanoic acid, octanoic acid, a-Ketoglutaric acid, ethanol, methanol, methyl ester, n-propanol, isopropanol, n-butanol, isobutanol, n-amyl alcohol, 3-methylbutanol, 2-methylbutanol, n-hexanol, 2-phenylethanol, polyalcohols (polyols), 2,3-butandiol, glycerol, eythritol, xylitol, arabitol (also called arabinitol), mannitol, acetaldehyde, acetoin and diacetyl, acetate, butyrate, oxanoate and other esters, ethyl acetate, ethyl formate, propyl acetate, isopropyl acetate, isobutyl acetate, isoamyl acetate, phenylethyl acetate, ethyl propionate, ethyl valerate, ethyl

hexanoate (caproate), ethyl octanoate (caprylate), ethyl decanoate (caprate), ethyl lactate, ethyl succinate (acidic ester), methyl o-anthranilate, amino acids, diammonium phosphate, proteins, nitrates, amino acid esters, vitamins, biotin, choline, gallic acid, coumaric acid, caffeic acid, ferulic acid, catechin, epicatechin, gallo catechin gallate, procyanidin, catechin catechin gallate, hydroxycinnamic acid esters, acids, glutathionyl caffeic acid, catechin+epicatechin, catechin-gallate, afzelechin, catechin, epicatechin, and gallo catechin, flavane (3,4) diol, flavonol-3, cyanidin, delphinidin, peonidin, petunidin, malvidin, anthocyanins, glycoside, catechin, epicatechin, potassium, sodium, calcium, iron, lithium, magnesium, copper, lead, manganese, aluminum, zinc, rubidium, arsenic, nickel, anions, phosphate, sulfate, borates, silicates, halogens, fatty acids, boron, fluorine, silicon, phosphate, sulfate, chlorine, bromine, iodine, anions, sulfur dioxide, acetaldehyde-bisulfite (bound SO<sub>2</sub>), fumaric acid, vinylbenzene, benzaldehyde,  $\gamma$ -nonalactone, ethyl phenylacetate, p-hydroxybenzoic acid, p-pyrocatechuic acid, gallic acid, vanillic acid, syringic acid, salicylic acid, o-pyrocatechuic acid, gentisic acid, cinnamic acid, cinnamic acid, p-coumaric acid, caffeic acid, ferulic acid, sinapic acid, coumaric acid, caffeic acid, ferulic acid, digallic acid, ellagic acid, flavonoids, afzelechin, catechin, gallo catechin, glycosides, tannins, flavylium ion, anthocyanins, pelargonidin, cyanidin, delphinidin, peonidin, petunidin, malvidin, ethyl acetate, ethyl caproate, terpenoids, glycosides, pyrazines, phenolics, chlorogenic acid, methyl anthranilate, ethyl anthranilate, methyl salicylate, ethyl salicylate, 2-methoxymethyl benzoate, 2 methoxyethyl



benzoate, ethyl trans-2 -butenoate, ethyl trans-2-hexenoate, ethyl trans-2-octenoate, ethyl trans-2-decenoate, ethyl trans, trans-2,4 decadienoate, ethyl trans, cis-2,4 decadienoate, ethyl trans, trans, cis-2,4,7-decatrienoate, ethyl trans, cis-2,6-dodecadienoate, methyl 3-hydroxybutanoate, ethyl 3-hydroxybutanoate, ethyl 3-hydroxyhexanoate, damascenone, furaneol, methoxyfuraneol, ethyl 3-mercaptopropanoate, trans-2-hexen-1-ol, hydrogen disulfide, carbon disulfide, dimethyl disulfide, dimethyl sulfide, diethyl sulfide, diethyl disulfide, methanethiol, ethanethiol, dimethyl sulfoxide, methyl thiolacetate, ethyl thiolacetate, cis and trans-2-methylthiophan-3-ol, 5-[hydroxyethyl]-4-methylthiazole, thio aliphatic alcohols, methanionol, or 3-(methylthio)-propanol, polyphenoloxidases, laccase, chlorogenic acid, protocatechuic acid, glutathione,, 2-S-glutathionylcaftaric acid, acetaldehyde, <sup>13</sup>C-Norisoprenoids, 1,1,6-trimethyl-1,2-dihydronaphthalene (TDN), vitispirane, ellagic acid, lignins, gallic acid, aromatic aldehydes, vanillin, syringaldehyde, coniferylaldehyde, sinapaldehyde,  $\gamma$ lactones, cis- $\beta$ -methyl- $\gamma$ -lactone, trans- $\beta$ -methyl- $\gamma$ -lactone, maltol, cyclotene, ethoxylactone, furfural, furfuryl alcohol, Guaiacol, geosmin, anthocyanine-bisulfite, malvidin glucoside, quinones, tartaric acid, potassium bitartrate, calcium tartrate, fumaric acid, calcium carbonate, sorbic acid, ethyl sorbate, benzoic acid and sodium benzoate, diethyl dicarbonate (DEDC), dimethyl dicarbonate (DMDC), iron, copper, aluminum, hydrogen sulfide, mercaptan, diethyl sulfide, ethyl mercaptan, (1)pH, diacetyl, acetoin, 2,3-butandiol, 2-

ethoxyhexa-3.5-diene, histamine, tyramine, putrescine, cadaverine, ethyl  
carbamate, urea and carbamyl phosphate.

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42. (Amended) A wine cork quality sensor, comprising:  
means for sensing data indicative of cork quality, wherein said means  
for sensing data comprises at least one sensor for directly monitoring at least one  
chemical factor within a cork indicative of cork spoilage; and  
means for measuring and quantifying said data.

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44. (Amended) The wine cork quality sensor of claim 42, wherein said  
at least one chemical factor is selected from the group consisting of 2,4,6-  
Trichloroanisole, o-Hydroxyanisole, 1-octen-3-one and 1-octen-3-ol, Trans-1,10-  
dimethyl-trans-9-decalol, 2-methylisoborneol and TCA (trichloroacetic acid).

45. (Amended) A method for measuring wine cork quality,  
comprising:  
sensing data indicative of cork quality, wherein the step of sensing  
data is carried out with means for sensing data indicative of cork quality,  
wherein said means for sensing data comprises at least one sensor for directly  
monitoring at least one chemical factor within a cork indicative of cork spoilage;  
and  
measuring and quantifying said data.

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47. (Amended) The method of claim 45, wherein said at least one chemical factor is selected from the group consisting of 2,4,6-Trichloroanisole, o-Hydroxyanisole, 1-octen-3-one and 1-octen-3-ol, Trans-1,10-dimethyl-trans-9-decalol, 2-methylisoborneol and TCA (trichloroacetic acid).

REMARKS

Claims 1-47 were presented for examination, are pending and are rejected. Reconsideration is respectfully requested.

The 35 U.S.C. § 112 Rejections

Claims 5, 33 and 35 are rejected as being indefinite.

Claims 5, 33 and 35 have been clarified. Therefore the rejection should be withdrawn.

The 35 U.S.C. § 102 Rejections

Claims 1-5, 8, 10, 11, 13-15, 34 and 36-38 are rejected as being anticipated by Paron et al. The rejection is respectfully traversed.

The wine thermometer patent describes an external sensor applied to the exterior of the bottle. While the patent claims to measure the wine temperature, in reality, the thermometer measures the temperature of the exterior of the glass container and indirectly extrapolates the internal temperature of the wine. The thermometer